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Abstract

Research on sex differences in leadership styles over the past decade (1987-1999) is reviewed and compared with the results of a meta-analysis of studies of the previous period by Eagly and Johnson (1990). Research on transformational or charismatic leadership is included in this review. As was the case in previous overviews, the evidence for sex differences in leadership behavior is still mixed, yet it is clear that these sex differences have not vanished. It is argued that sex differences in leadership styles are largely a consequence of the context in which male and female leaders work. Organizational factors like sex-composition of the immediate working context and hierarchical level are important moderators of leadership styles. We conclude that future research should unravel the impact of structural and organizational features, that are still so confounded with gender, on leadership behavior.

Gender and Leadership Styles: A Review of the Nineties

Are women and men different leaders? This question has always been surrounded with much controversy. Two opposing positions are generally taken in this debate. The position that men and women differ fundamentally in how they lead others is most prominent in popular management literature, i.e. books and magazines written primarily for practicing managers and the general public (e.g., Helgesen, 1990; Loden, 1985; Rosener, 1990). Some scholars who subscribe to this difference position claim that women have a different, "female voice" (Gilligan, 1982) that has been overlooked by mainstream theory and research (e.g., Hare, 1996; Kibbe Reed, 1996; Perrault, 1996). On the other hand, a considerable portion of the social science literature favors the similarity position, claiming that, all things considered (or controlled for), men and women lead in similar ways (e.g., Dobbins & Platz, 1986; Klenke, 1993).

Empirical evidence for both positions accumulated through the years, contributing to the confusion in the field. In 1990, Eagly and Johnson published a meta-analysis on gender differences in leadership styles, based on studies done between 1961 and 1987. Its major conclusion was that, in organizational studies, female and male leaders did not differ in interpersonally oriented style and task oriented style. In two other types of studies, laboratory and assessment studies, men were found to be more task oriented and women more interpersonally oriented. Also, women tended to adopt a more democratic or participative style and a less autocratic style than men in all three types of studies (Eagly and Johnson, 1990).

In the present article, we aim to review the more recent empirical evidence on similarities and differences in women's and men's leadership styles to find out whether there is still such a mixture of sometimes contradictory results, or that perhaps more unity is emerging. In addition to the leadership styles studied by Eagly and Johnson (1990), today's most prominent leadership style in leadership theorizing, i.e., charismatic or transformational leadership (e.g. Bass & Avolio, 1994), is included in this review.

First, we will address the issues of studying sex differences in general, and then discuss in some more detail the study of sex differences in leadership styles, its attractions and difficulties. We will present empirical evidence from previous studies, to develop the hypotheses that will guide our research.

The Study of Sex Differences in Leadership

In the research literature on sex differences in any trait, behavior, competence or skill, one usually can detect two competing streams of evidence: One minimizing or

ignoring sex differences, the other maximizing or aiming to demonstrate differences. In feminist theory, this debate is known as the similarity-difference controversy (e.g., Bacchi, 1990; Scott, 1988). The "similarity" tradition is based on the assumption of fundamental equality of the sexes and considers sex differences a consequence of a long history of unequal treatment. When women will have obtained equal rights, equal treatment and the same access to power as men, sex differences will disappear. The opposing "difference" tradition celebrates women's essential difference from men in behavior, feelings and thought. Often, women's superiority is claimed, and consequently, for these theorist equality is too limited a goal. Social change can be reached by revaluing feminine characteristics.

This theoretical debate is reflected in the controversy about gendered management styles. Research by Schein c.s. (Schein, 1973, 1975; Schein, Mueller, & Jacobson, 1989; Brenner, Tomkiewicz & Schein, 1989) has shown that in most countries characteristics of successful managers are perceived to be similar to characteristics of men, not women. During the 1970s, much of the literature was based on the similarity view and aimed at discrediting the stereotypical belief that women lack the necessary attributes to succeed in management (Wajcman, 1996). Recently, however, it is often predicted that women "will make it to the top" because of their supposed different characteristics (e.g. Peters, 1990; Rosener, 1990). Supporters of the "difference standpoint" claim, for instance, that women's leadership is based on previously unrecorded dimensions of leadership like spirituality (Hare, 1996); feeling (Fisher & Nelson, 1996); or care and friendship (Perrault, 1996).

Because one tradition has more to gain by finding differences and the other by refuting them, it is important to have a critical look at research on sex differences. How do we decide whether there is a difference or a similarity? Beneath the difference in empirical evidence showing either sex similarities or differences, there often are differences in methodology and data gathering. Three problems are typical of the literature on sex differences in leadership styles.

All-female Studies. Conclusions regarding women's special values, behavior and management style are often based on data from studies of only women. Mainstream leadership research has been concerned mainly with men leading other men (Nieva & Gutek, 1981). According to Denmark (1993), "by ignoring gender as a variable in studies on leadership, researchers created many blanks in theoretical and research designs" (p.345). In the last decades, however, women have entered the workforce in great numbers, slowly trickling into the management and executive layers. Simultaneously,

studies on gendered organizations, on female leaders, and on women in management appeared, now forming a massive body of literature itself.

One of the first studies, by Apfelbaum and Hadley (1986), was based on interviews of fifteen leading women in France and the USA. These women stated that they did not use a similar style as their male colleagues. They described themselves as down-to-earth, result-minded, participatory and aware of personal values of subordinates, and good listeners, resulting at times in a maternal, momma-leadership style (p.215). Stanford, Oates & Flores (1995) interviewed twelve women who were selected because they appeared in newspapers. The women facilitated communication, were team builders, used referent or reward power, inspired, motivated, and fostered mutual trust and respect. Willemsen, Rojahn & Fischer (1993) concluded from a survey among 273 female readers of a Dutch glossy magazine "Woman and Business" that women prefer a consulting leadership style. Similarly, Helgesen (1990) concluded from diary studies of four female leaders that their leadership style was participative, consensus building and empowering, leading to "a web of inclusion" rather than men's hierarchical leadership. However, reactions from male managers stating that they - although being men - recognized their own experience in the leadership style described by Helgesen, necessitated an adjustment of the conclusions. In 1995, Helgesen stated that the "web of inclusion" is not strictly reserved to women.

Usually, authors studying only women caution that they do not wish to make comparisons with men (as managers), but instead study women from a women's perspective, often focussing on the diversity among women (as leaders). Nevertheless, a conclusion of difference is hard to avoid and is often implicitly made.

Strong Conclusions Based on Mixed Results. What kind of results do we need to be able to conclude that a sex difference in leadership style does exist? In general, the concept of style includes a variety of behaviors. What should our conclusion be if differences are found on some measures but not on others? Let us consider, for example, three studies reported in a paper by Bass, Avolio and Atwater (1996). The first study was also published by Bass and Avolio in 1994, under the title "Shatter the glass ceiling: Women may make better managers". Significant sex differences were found on all four transformational leadership scales and on two of the four transactional scales. In the second study, significant differences occurred only for half of the transformational and for one of the transactional scales. In the third study, only two out of seven subscales showed significant sex differences. Thus, the results were at least mixed. One could conclude that there are hardly any differences, or conclude what is implied in the title of

the first study, an overwhelming difference.

Confounding. Sex is often confounded with other variables**.** Status (e.g. Doherty, 1997), hierarchical level in the organization (e.g. Denmark, 1993; Rinfret & Lortie-Lussier, 1997), organizational type (e.g. Gardiner & Tiggeman, 1999), and number and characteristics of subordinates (e.g. Druskat, 1994; Lee, Smith & Cioci, 1993), are just some of the variables that are often correlated with manager's sex and might as well explain differences found between men and women. Detailed analyses should specify the impact of each of the confounding variables before it can be concluded that a difference is in essence sex based.

Leadership Styles

Various classifications of leadership styles, the patterns of leadership behaviors, have been used in research. The dimension of autocratic and democratic decision-making (also called directive versus participative, or job-centered versus employee-centered leadership) was introduced by Lewin and Lippitt in 1938. The dimension autocratic to democratic leadership ranges from the leader not allowing interference of subordinates in decision making and leading more autocratically, to the leader behaving more democratically and inviting subordinates to participate in the decision making. The dimension autocratic versus democratic leadership is considered to be a single bipolar dimension, i.e. a continuum. Acting democratically excludes being autocratic at the same time, but leaders may use both styles depending on the particular situational contingency of both the task structure and subordinate characteristics (e.g. Vroom & Yetton, 1973; Hersey & Blanchard, 1974). Sometimes another style, laissez-faire, is added, representing an avoidance of leader behavior (e.g. White and Lippitt, 1960).

The dichotomy task oriented versus interpersonally oriented was introduced by Bales (1950) to describe the division of leadership tasks in small groups. Interpersonally oriented leadership includes behavior such as helping and doing favors for subordinates, looking out for their welfare, explaining procedures, and being friendly and available. Task oriented leadership consists of behavior such as having subordinates follow rules and procedures, maintaining high standards of performance and making leader and subordinates roles explicit. Some authors consider task oriented and interpersonal oriented leadership as separate, relatively orthogonal dimensions (e.g. in the Leader Behavior Description Questionnaire by Halpin & Winer, 1957), whereas others consider these orientations as two ends of a single continuum (e.g. in the Least Preferred Co-Worker instrument by Fiedler, 1967).

The last decades there has been a flurry of research on a leadership style referred to

by various scholars as visionary, charismatic, transformational, inspirational and post-heroic leadership (e.g. Conger & Kanungo, 1994; Den Hartog, van Muijen & Koopman, 1994). Transformational leadership is part of a dichotomy, it is differentiated from transactional leadership. Transactional leadership comprises (a) contingent reward, negotiated agreements between leaders and followers about objectives and task requirements and suitable rewards; and (b) monitoring and correcting of, and intervening in, follower performance, called management-by-exception (Bass et. al., 1996). Both transformational and transactional leadership are thought to vary independently. Transformational and transactional leadership are often contrasted with the absence of leadership, laissez-faire, also mentioned earlier in the context of autocratic and democratic decision making (e.g. Bass & Avolio, 1994).

Sometimes charismatic leadership and transformational leadership are used as synonyms, but often charisma is considered a subdimension of transformational leadership, along with the subdimensions inspiration, intellectual stimulation and individual consideration (Bass, Avolio & Atwater, 1996). Charismatic leaders are often described by the extraordinary impact they have on their followers; unquestioning obedience, loyalty and idolization. Some behavioral attributes of charismatic leadership seem accepted as central to transformational leadership. According to Carless (1998), transformational leaders "… articulate a vision, use lateral or non-traditional thinking, encourage individual development, give regular feedback, use participative decision-making, and promote a cooperative and trusting work environment" (p.888).

Gendered Leadership Styles

The above mentioned modes of leadership styles either emphasize maintenance of tasks (e.g., autocratic, task oriented, or transactional styles) or on nurturing of interpersonal relationships (e.g., democratic, interpersonally oriented, or transformational styles). Therefore, they relate to gender because they reflect the femininity/masculinity dimensions of existing sex stereotypes. In general, the content of sex stereotypes is that men are considered instrumental, competent, rational and assertive (masculinity) and women sensitive, warm, tactful and expressive (femininity) (e.g. Broverman, Vogel, Broverman, Clarkson & Rosenkrantz, 1972; Deaux & Lewis, 1984; Williams & Best, 1982). Similarly, the task oriented and interpersonally oriented styles closely match constructs like communion and agency (Bakan, 1966) or intimacy and independence (Tannen, 1990) that refer to respectively feminine and masculine modes of relating to others. The feminine modes are characterized by strivings for intimacy and union reflected in agreeable behaviors, whereas the masculine modes imply striving for mastery

and dominance.

Cann and Siegfried (1990) assessed the correspondence between stereotypes of men and women and interpersonal- and task oriented leadership behaviors in two studies. In the first study respondents rated sex-typed traits on a scale ranging from 'consideration' to 'structuring'. Masculine traits were considered consistent with structuring, whereas feminine characteristics were considered consistent with consideration. In the second study, descriptions of leader behaviors were rated on a scale ranging from masculine to feminine. Consideration behaviors were considered feminine, while structuring behaviors were considered masculine. Therefore, task oriented leadership can be called a stereotypically masculine style and interpersonally oriented leadership a stereotypically feminine style.

Often, authors refer to transformational leadership as a feminine leadership style (e.g. Carless, 1998; Helgesen, 1990; Loden, 1985; Yammarino, Dubinsky, Comer & Jolson, 1997). Research by Hackman, Furniss, Hills and Paterson (1992), however, showed that transformational leadership is associated with both feminine and masculine characteristics, which suggests that transformational leadership is a stereotypically gender-balanced style.

Many authors refer to the more instrumental, task oriented, autocratic styles explicitly as masculine leadership styles and to the interpersonally oriented, charismatic and democratic styles as feminine leadership styles. We prefer the terms "stereotypically masculine styles" and "stereotypically feminine styles". In this way it is clear that the dichotomies of leadership styles do not necessarily coincide with biological sex.

Due to the correspondence of the stereotypic gender dimensions and the leadership dimensions, many researchers assume, with or without empirical evidence, that there will be sex differences in the leadership styles they study and present explanations for these differences. In the next paragraphs we will discuss empirical evidence for sex differences--or similarities--in leadership styles. From this evidence we will distill the research questions and predictions that will form the focus of our review of recent empirical studies.

Expectations from Empirical Evidence

Eagly and Johnson (1990) present in their meta-analysis results based on various empirical studies, which allows us to formulate expectations of sex similarities or differences in leadership behavior. We will restrict these to two types of expectations, concerning the influence of study characteristics, i.e. the specific research context and methodological set-up of studies, and the influence of the organizational context in which

managers lead, on the occurrence of sex differences in leadership behavior.

Characteristics of the Study. Overall, Eagly and Johnson (1990) found that women were more interpersonally oriented, more task oriented and more interpersonally oriented on the bipolar interpersonal versus task orient leadership style than men. However, the type of study qualified the effect. In organizational studies, differences were almost negligible. Sex differences were more pronounced, albeit still small, in assessment studies, and most pronounced in laboratory studies. In all types of studies sex differences in the democratic versus autocratic leadership dimension were found: women showed more democratic leadership than men. However, in most studies the democratic versus autocratic style measures were self-reports (18 out of 28 comparisons, see Table 1), which more often lead to stereotypic results than behavioral studies (3 out of 28) or reports from subordinates (4 out of 28 comparisons).

Eagly and Johnson (1990) explained the finding that sex differences in leadership styles in organizations are smaller than in laboratory studies by arguing that in organizational studies male and female managers are selected (and select themselves) on the same managerial criteria. In laboratory studies, findings are generally based on students, who can take their refuge in gender role behavior more easily than in leader role behavior, of which they have little or no experience. We expect that the same influence of study context will be present in the empirical studies we review, i.e., that studies in organizational settings will show fewer sex differences than studies in laboratory settings or assessment studies (Prediction 1).

Another important factor in the occurrence of sex differences in leadership styles is the identity of the rater. The rater can be a researcher, using for example behavioral observation. Ratings can also be given by the leaders themselves, their supervisors, subordinates or colleagues, in interviews or questionnaires. Eagly and Johnson (1990) found a discrepancy between results from self-report studies and studies using subordinates as raters. Self-ratings were more stereotypic than subordinate ratings for the interpersonally oriented and the task oriented styles, i.e., female leaders rated themselves more interpersonally and less task oriented than subordinates did. For the autocratic-democratic dimension of leadership this influence of the rater could not be studied because most studies were based on self-ratings (see Table 1). Therefore, it is quite possible that the substantial sex difference on this dimension is confounded with the effect of the rater. For our review, we expect that, in general, studies based on self-reports by leaders will show more stereotypical sex differences than those based on ratings by subordinates (Prediction 2).

Organizational Context. It seems logical to expect that the social setting of a leader, such as the hierarchical level, particular team, and type of organization, can influence the application of a particular leadership style. In the present study we are interested in the question whether these structural features interact with a leader's sex. We will study two types of structural features, the organizational level and organizational demography.

In their meta-analysis, Eagly and Johnson found that organizational level had little impact on the effect sizes of autocratic versus democratic, interpersonal versus task, and interpersonal styles. However, they did find a tendency for first-level male managers to be more task oriented than women, and for mid-level female managers to be more task oriented in comparison with men. Accordingly, we expect that men and women hold positions of different power that are related to the leadership styles they apply, but that organizational level in itself does not have a different impact on the leadership styles of male and female managers (prediction 3).

Kanter (1977) argued that women who have a token status in a predominantly male organization might be treated and perceived differently because of their visibility, and change their style accordingly. Eagly and Johnson (1990) indeed found that, to the extent that men predominated among the leaders whose style was assessed, the tendencies for women to be more interpersonal and more democratic weakened. The percentage of men among leaders' subordinates also related significantly to the effect sizes for some of the styles in the organizational sample. In an environment with larger proportions of male subordinates, male leaders were more task oriented and less democratic than female leaders, but more interpersonally oriented on interpersonal versus task measures. We also expect that the sex ratio of both the management layer and the subordinate team moderates sex differences in leadership styles (prediction 4).

Changes in Sex Differences over Time. In the meta-analysis of Johnson and Eagly (1990), the more recent studies (within the period from 1961 to 1987) of interpersonal and task styles were more stereotypic. By contrast, studies of the democratic-autocratic dimensions and studies placing task oriented and interpersonal oriented styles on a single dimension became less stereotypic in time.

Another time-related factor is age of the manager. Eagly and Johnson (1990) found that older leaders were more stereotypical in their interpersonal style but less stereotypic in their task style. No differences were found on the other styles. The authors cautioned that these results are limited because of large amounts of missing data and that results may have been confounded with other variables.

In general, overviews of studies of sex differences in cognition demonstrate that

these differences have become considerably smaller or have even vanished within the last 30 or 40 years (Feingold, 1988). On the other hand, sex stereotypes, which form an important factor in leadership behavior, are very persistent (Fiske and Stevens, 1993). Together with the mixed results of Eagly and Johnson (1990) this evidence makes us refrain from formulating an expectation on time dimensions.

Method

Sample of Studies. The present overview deals with studies reported in peer-reviewed journals from 1987 to 2000. Two sources were used to identify relevant articles, i.e., articles reporting on studies in which the leadership styles of men and women were compared. In PsycLit databases 1987-1999, searches were conducted using the keywords sex differences or gender differences combined with leadership. This resulted in 482 hits. Of these, 17 were empirical articles on the leadership styles under study. The Social Sciences Citation Index (SSCI) was used to track down articles referring to Eagly and Johnson's (1990) meta-analysis since the publication in 1990 upto and including December 1999. Of the 138 articles citing Eagly and Johnson, 6 additional articles turned out relevant empirical studies on gender and leadership styles.

Eagly and Johnson (1990) restricted their meta-analysis to studies using one of the following dimensions: Task oriented leadership, interpersonal oriented leadership (both unipolar), task versus interpersonal oriented leadership (bipolar), and democratic versus autocratic leadership (bipolar). In addition to studies on these dimensions, we also included studies on charismatic, empowerment or transformational leadership styles. Transactional leadership was coded as task oriented leadership, because in practice the two constructs coincide. We excluded studies on emergent leadership, effectiveness of leader behavior, or evaluation of leader behavior.

The review comprises 72 comparisons made in 23 articles: 20 comparisons of interpersonal style, 18 of transformational style, 26 of task or transactional style, and eight of democratic versus autocratic style. No studies on the bipolar task versus interpersonal leadership dimension were found. An overview of the main characteristics of the individual studies, with effect sizes (if it was possible to calculate them), measurement instruments, study settings, rater types and sex composition of each study, is presented in the Appendix.

Table 2 shows how often a leadership style was significantly more used by female leaders, by male leaders, or how often a comparison showed a similarity between male and female leaders. Sometimes different subscales describe a leadership dimension. Each subscale was then treated as a proportion of one comparison. Thus, when two subscales

form one leadership style and one of the subscales showed a significant effect whereas the other did not, the comparison was given the score .5 for difference and .5 for similarity.

Furthermore, the proportion of differences in the stereotypic direction, and the mean effect size of each style are reported. The proportion of differences in the stereotypic direction, the 'proportion stereotypic', is the proportion of the total number of comparisons that showed a significant difference in the gender stereotypic direction. We also calculated the 'absolute difference', the proportion of stereotypic differences, whether significant or not. For the effect sizes, positive numbers indicate that women use a style more often, and negative numbers that men use a style more often. Due to limited statistical information, mean effect sizes could only be calculated for approximately half of the comparisons. Finally, several characteristics of the study are summarized. These are the setting, rater identity, and the sex composition of the leader context. A similar summary of the results of Eagly and Johnson's meta-analysis is presented in Table 1.

Reviewing Method. Meta-analyses in the field of gender and leadership styles (Dobbins & Platz,1986; Eagly & Johnson,1990) gave insight into the scattered findings of the growing amount of studies on sex differences in leadership styles, showing the overall effect sizes of sex differences and pointing out new directions of research. Studies performed after the appearance of the meta-analyses build on these quantitative reviews, often taking one or more of the suggested moderating variables as their subject of study. This has led to a heterogeneous set of new studies, each presenting a unique combination of moderating variables. Because the 23 studies differ considerably in the methods applied, the samples used, and the research questions addressed, a meta-analytic approach is hardly feasible. Therefore, we chose to review the present sample of studies in a mainly narrative way. We will discuss the three research themes (characteristics of the study, organizational context, and trends in time) separately.

Results

For all 72 comparisons, we first noted whether women or men used a certain style significantly more, or whether no significant gender differences were reported. As is apparent from the top rows in Table 2, in the majority of comparisons no significant sex differences were found, or, stated differently, men and women made a similar use of the leadership styles under study. A total of 27% of the comparisons showed significant sex differences in a stereotypic direction. The mean effect size could be calculated for 54 comparisons. It was only .05, which is still higher than Eagly and Johnson's (1990) mean overall effect size of .02 but in itself not very impressive.

Of the separate styles, transformational style comparisons are most stereotypic, with 39% of the comparisons in the stereotypic direction, followed by interpersonal style comparisons of which 28% is stereotypical. Only 23% of the democratic versus autocratic and 19% of the task style comparisons are in a stereotypic direction.

Characteristics of the Study. In contrast with our expectation (Prediction 1), organizational studies were overall more often stereotypic (32%) than laboratory studies with students in leadership roles (20%, see Table 3). Laboratory and organizational studies employing an assessment method showed the fewest stereotypical differences (17%).

Hardly any support was found for the prediction that self-ratings tend to be more stereotypical than subordinate ratings (Prediction 2). Twenty-six percent of the subordinate comparisons were in a stereotypical direction, whereas 32% of the self-ratings were in a stereotypical direction. Especially for the stereotypical feminine styles the self-ratings showed more stereotypical differences between male and female managers (see Table 3). The observational comparisons showed the smallest percentage of stereotypical findings (13%). However, the different studies were done in such diverse settings that confounding of context characteristics and instrument type is very likely.

Fortunately, some studies implicitly or explicitly examined the effect of rater type on sex differences of leadership styles. Lewis and Fagenson-Eland (1998) studied whether self-ratings are more stereotypic on initiating structure and consideration. Female leaders from a federal government agency rated themselves as less task oriented, but not more interpersonally oriented, than male leaders, but ratings by their supervisors did not show this stereotypic difference. In a study of transformational leadership in branch managers of an international bank, Carless (1998) found that both supervisors and managers themselves rated female managers higher on transformational leadership than men. Subordinates evaluated female and male leaders equally. Thus, Carless found self-ratings to be more stereotypical than subordinates' ratings. The results for the supervisors in these two studies are, however, contradicting each other.

In two studies on the same sample of university hall directors Komives (1991a; 1991b) finds that rater type has no effect on comparisons between male and female leaders. One study used self-ratings, the other subordinate ratings on transformational and transactional leadership, and both reported no significant sex differences on either leadership style. Effect sizes were smaller, however, for the subordinate ratings than for the self-ratings. Women tended to be less transactional and less transformational on both type of rater instruments, but more so for the self-ratings. Thus, in contrast with the

results of Carless (1998), if we forget significance for a moment, self and other ratings were counter-stereotypical for transformational leadership and stereotypical for transactional leadership.

Hare, Koenigs and Hare (1997) compared 130 female managers with 130 male managers with similar background characteristics who took part in a workshop. No differences between self-ratings and peer ratings were found on the democratic versus autocratic dimension. Both self-raters and peer raters considered the female managers more democratic and interpersonally oriented than the male managers.

In a role-play experiment by Korabik, Baril, and Watson (1993), students with and without management experience were asked to resolve a conflict. The behavior and outcomes were registered and compared with the evaluations of the leaders and subordinates in the role-play, so both leader-subordinate and rating-behavior comparisons could be made. The only difference found was that the self-ratings by inexperienced leaders were more stereotypical, they rated themselves higher on the feminine styles than inexperienced male leaders. The observation measures, that showed no sex differences, suggest that we should interpret this finding as a bias.

Johnson (1993), on the other hand, found no differences between self, subordinate and observational instruments on sex comparisons of directive and supportive behaviors by students acting as leaders in an organizational simulation. None of these instruments showed a sex difference in stereotypical direction. Sakata and Kurokawa (1992, study 2) also reported similar results from behavioral observations and self-ratings. The Japanese female students in their simulation study were more task oriented and less interpersonal oriented, thus in counter stereotypical direction, on both behavioral and self-rating instruments.

Summarized, sometimes behavioral ratings lead to other conclusions than ratings. When considering only ratings we tend to conclude that self perceptions of leadership style are in general more often stereotypical than subordinates' perceptions. Furthermore, subordinates' ratings frequently contrast with ratings by leader's supervisors and peers, which are also more often in a stereotypical direction.

Organizational Context. Prediction 3 stated that the organizational level of a leader will influences leader behavior, in the same way for men and women. For 48 comparisons information was available on the organizational level of the leader. Of these, 2 comparisons were of high-level leaders, 14 concerned mid-level leaders, 17 low-level leaders, and 15 comparisons concerned leaders on all organizational levels. The stereotypical difference for the high-level leaders was .67, for the mid-level leaders .42,

and for the low-level leaders .28. Thus, on first sight it appears that the higher the hierarchical level of the leader, the more stereotypical the use of leadership styles.

Inspection of some relevant individual studies allows a better understanding of the complexity of the relationship between organizational level and the size of a stereotypical difference between male and female managers. Bass, Avolio and Atwater (1996) found substantial support for stereotypical differences for high level leaders in Fortune 50 firms (see also Bass & Avolio, 1994), little support for differences between male and female middle level leaders in small organizations, and no support in a large sample of all-level leaders. In these studies, differences between male and female leaders were more pronounced at the higher organizational levels. However, an alternative explanation is the size of the organization. In large Fortune 50 companies the range of organization levels is larger, and female and male managers may differ more than is possible in smaller firms. Moreover, the few female leaders in these Fortune 50 firms form exceptions and may be less representative of female managers in general than their male colleagues are of male managers in general.

In contrast with the above mentioned results, Denmark (1993), in a study with a sample of managers from diverse settings, found that both male and female leaders with higher status were more empowering than leaders with lower status. In a study in which evening students described their daytime managers, Maher (1994) also did not find evidence for sex differences in the effect of organizational level on ratings of transformational or transactional leadership.

Lewis and Fagenson-Eland (1998) also studied the impact of sex and organizational level on task and interpersonally oriented leader behaviors, using self and supervisor ratings. They found that female leaders rated themselves less task oriented than male leaders, and high level leaders were rated more interpersonally oriented than lower level leaders by supervisors. No interaction effects of sex and organizational level were found on either self- or supervisor ratings.

From these and other studies we can conclude that there is no simple relationship between hierarchical level and stereotypicallity of leadership behavior, although the data seem to indicate it. Many context variables may influence this relationship, and sometimes confounding of variables, such as for instance hierarchical level and size of firm, may affect the easy interpretation of results.

We will now turn to one of these other context variables, the sex composition of a manager's surroundings. We expected that both the sex-composition of the management team and the sex-composition of the subordinate team (Prediction 4) will influence

leadership styles of men and women. In reality, gender-ratios of management layers and subordinate teams will often concur, as the labor market is highly segregated by sex. Female managers and subordinates tend to work more often in female-dominated industries, whereas male managers and subordinates more often work in male-dominated.

The results described in Table 3 seem to indicate that there are more stereotypical findings in educational and business settings and fewer in governmental settings. Educational and business settings can be considered as gender-typed contexts, the first being more female-dominated and the second more male-dominated. Governmental settings in general are more gender-balanced in terms of labor participation. Although the limited amount of comparisons within styles per organizational setting makes it hard to review the data quantitatively, we did attempt a quantitative analysis. We calculated the gender-ratios of each study and correlated those with the stereotypical differences. Seventeen studies representing 51 comparisons presented information on the total numbers of male and female managers in their sample. Ten studies representing 28 comparisons contained sufficient information on the sex-composition of the subordinate sample. No significant correlation between gender ratios and stereotypical comparisons was found. However, the gender ratios within studies are often skewed as well. For instance, Jantzi and Leithwood (1996) report that their sample of teachers, who rated their principals of elementary and secondary schools, the female principals--who were more transformational--more often led teams of female teachers and were more often principals of elementary schools, whereas the male principals were more often principals of secondary schools with relatively more male teachers. This type of confounding can be noted in many settings, which makes research in this area complicated.

Only few studies have explicitly studied the influence of sex-composition of the context on leadership behavior. In a controlled organizational simulation, using behavioral observations, Johnson (1993) found that male and female leaders led their (two) subordinates similarly if they were of the same sex as the leader. When the two subordinates were of the opposite sex, both male and female leaders were observed to be more task oriented. However, in the self-ratings and subordinate ratings, this interaction effect for task oriented leadership was not found.

Some organizational studies also address the sex-composition issue. Komives (1990b) asked residence assistant to describe their hall directors in terms of transformational, transactional and laissez-faire leadership behavior. She found a tendency for female assistants to describe their male director as more transformational and less laissez-faire than female-female, male-female and male-male assistant-director-

pairs.

A contrasting finding was reported in a study among male and female leaders in respectively all-female and all-male religious orders (Druskat, 1994). Female leaders were rated more transformational than male leaders. Druskat argues that, in a situation where they are the rule rather than the exception, women do not need to conform to masculine typed styles and are free to use the style that better suits them.

Recently, Gardiner and Tiggeman (1999) asked 60 female and 60 male managers in several male-dominated and female-dominated industries to give self-descriptions in terms of task orientation and interpersonal orientation. The male-dominated contexts included the automotive industry, the timber industry, academia, and consulting and accounting firms, whereas the female-dominated contexts included beauty parlors, nursing and childhood education. Female managers were more task oriented in male-dominated contexts and more interpersonally oriented in feminine contexts than male managers.

In summary, organizational factors, especially sex-composition of a work environment, are likely to affect the behavioral styles of male and female managers. Both to some extent adapt to the organizational context, acting more congruent with the female- or male-dominated setting. However, there seems to be an asymmetry in this adaptation, as female managers may adapt their styles more often than men do.

Trends in Time. Table 2 shows that less than one third of all comparisons is in a stereotypical direction (27%), that 11% of the sex differences is counter-stereotypical, while more than half of the comparisons (62%) shows a similarity (i.e., no significant difference) between male and female managers.

However, to be able to compare the results of our overview with those of Eagly and Johnson's (1990) review, we have to look at the absolute stereotypic difference, in which every difference, significant or not, is counted. Then we find 78% of stereotypic differences overall, which is a larger proportion than Eagly and Johnson's 51%. Especially the differences in feminine styles were more often stereotypic. However, democratic versus autocratic leadership, which showed an absolute stereotypic difference of 94% in Eagly and Johnson's comparisons, in the present sample was only stereotypically different in 23% of the comparisons.

Conclusion

In the present review, we wanted to study whether gender differences in leadership style still exist, and whether their occurrence is still influenced by contextual factors, as was the case in the meta-analysis by Eagly and Johnson (1990). As those authors selected

their studies generally on the same criteria we used, we included in our review only studies that appeared after the Eagly and Johnson study.

We can conclude that sex differences in leadership styles still existed towards the end of the twentieth century. In general, however, male and female managers lead similarly; the overall effect size was .05, and only 27% of the comparisons resulted in a significant stereotypic difference in leadership style. Still, sex differences have not diminished or vanished. Interestingly, the strongest effect in Eagly and Johnson's analysis, that women lead more democratically in all types of contexts, was the weakest effect in our more recent sample of studies. Democratic versus autocratic leadership is closely linked with transformational leadership, which has become the central focus of today's leadership theories. This style, more often used by women than by men, emphasizes employee empowerment and participation in decision making.

Whereas Eagly and Johnson (1990) found more sex differences in laboratory studies than in organizational studies, we found the opposite result. Little differences between leadership styles of male and female managers occurred in studies using an assessment methodology, laboratory studies were in-between, and organizational studies showed most differences. However, within all three types of studies the findings show considerable variation.

Together, these findings--that sex differences in leadership styles have not at all disappeared and that they are found especially in organizational studies--may imply that female leaders, maybe because they are not anymore so much of an exception as they used to be, feel less obliged to adapt to traditionally masculine ways of leading as they used to.

Structural features of the context in which leaders work, such as the managerial level, group characteristics and the organizational type affect the leadership style that is used. Supposed sex differences in leadership style are often a consequence of the fact that women more often lead teams of women and teams of men are more often lead by men, women more often are leaders in stereotypical feminine organizational types (e.g. the service sector) and men in stereotypical masculine typed organizations (e.g. the technical and manufacturing industry), and the management level of female leaders is relatively lower than that of their male counterparts.

For instance, when sex of the manager is the only salient characteristic that raters have for forming an impression of a "vignette-manager" and all other relevant factors for leader behavior in a study are omitted, sex differences are almost bound to appear. The salience of sex as a predictor of (perceived) behavior is so embedded in the culture that

other, potentially confounding, variables are either controlled for in laboratory studies or ignored in field studies. Sex differences therefore seem to exist in the eye of the beholder. This is especially true for self-perceptions since self-perceptions are more stereotypical than perceptions and behavioral ratings by independent raters and subordinates.

In fact, the picture appearing after reviewing studies this last decade, is one of leadership as a highly contextualized phenomenon, and results need to be considered in close scrutiny with particular characteristics of study-, perceptual- and organizational factors.

The call for attention to "context" when studying gender differences in leadership (Deaux & Major, 1987; Klenke, 1996; Butterfield & Grinnell, 1999) is certainly acted upon by researchers this last decade. Unfortunately, at this moment it has mainly resulted in another accumulation of inconsistent, contradictory findings and more confusion in the field than existed already. As we have argued in this article, the intertwining of different contextual features, both methodological and organizational obfuscates relations between gender, leadership style and context. Future research should try to disentangle the several contextual factors. For example, ideally, research on the impact of macro-contextual variables such as industry type (for example profit versus non-profit industry, service versus technological industry, small versus large firms) should take into consideration both meso-contextual variables such as organizational structure and - culture, as well as micro-contextual variables such as leader characteristics and team characteristics, and vice versa. Studies considering the impact of a single micro-, macro- or meso-level contextual variable should try to exclude confounding of their main variable of interest with other contextual variables on any level. Every researcher who sets out to do this in an organization, however, will face problems as reality is intertwined and confounded.

More research is needed that takes the confounding of contextual variables itself as the main subject of study. The processes along which men and women are allocated to different organizations and positions in organizations, resulting in sex-segregation and inequality of power resources should be studied together with the impact of these structural processes on leadership styles. This requires, for instance, longitudinal studies on organizational acculturation and studies using an intergroup or social identity perspective.

The confusion in the field also results from researchers' persistence in working with simple two-dimensional models despite the multifaceted leadership practice. Dichotomous conceptions of leadership styles such as task- versus interpersonal orientation and democratic versus autocratic decision making are subsequently mentioned

in the same breath with femininity and masculinity or even with biological sex. In the first place, it is questionable how well dichotomous conceptions of leadership styles represent the management context. Moreover, it needs to be considered whether it is fruitful at all two link the various dichotomies (leadership styles, femininity-masculinity, man-woman) together, as if they all represent aspects of one and the same the same underlying dimension. Empirical evidence suggests a reality that is far more complex.

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* = Studies included in the review

Table 1. *Summary of studies included in the meta-analysis of gender and leadership styles 1961-1987, Eagly & Johnson (1990)*

Variable and class	all comparisons (n = 370)	interpersonal style comparisons (n = 153)	task style comparisons (n = 154)	interpersonal versus task comparisons (n = 35)	democratic versus autocratic comparisons (n = 28)
Effect size[1]	.02	.07	.09	-.03	.34
Absolute difference[2]	175/341(.51)	87/141 (.62)	52/144 (.36)	14/32 (.44)	22/24 (.94)
Organizational studies:	289	131	128	17	13
Educational	210	94	93	11	12
Governmental	19	9	8	2	0
Business	26	11	11	3	1
Miscellaneous	34	17	16	1	0
Assessment studies	56	15	15	16	10
Laboratory studies	25	7	11	2	5
Identity of raters:					
Subordinates	120	57	58	1	4
Supervisors	15	8	7	0	0
self-rating	197	73	72	34	18
other	38	15	17	0	6
Sex-composition (%**%**):					
Subordinates	16.3	16.2	16.3	25.5	18.7
Leaders	73.0	73.0	73.0	61.6	61.8

[1] Effect sizes (unweighted) are positive when women use the style more and negative when men use the style more.

[2] The 'absolute difference' represents the proportion of comparisons that were in the stereotypic direction - not necessarily significant. The proportion appears in parentheses.

Table 2. *Summary of study characteristics of research on gender and leadership styles 1987-1999.*

Variable and class	all comparisons (n = 72)	interpersonal style comparisons (n = 20)	transformational style comparisons (n =18)	task and transactional style comparisons (n =26)	democratic versus autocratic comparisons (n = 8)
Percentage:					
- women use style more	28	28	39	23	23
- similar use of style	62	66	59	65	77
- men use style more	9	6	1	19	0
Proportion stereotypic[1]:	.27	.28	.39	.19	.23
Absolute difference[2]	.78 (54)	.86 (14)	.88 (16)	.76 (17)	.43 (7)
Effect size[3]	.05 (54)	.24 (14)	.14 (16)	-.20 (17)	.05 (7)
Organizational studies:	48	11	17	16	4
of which assessment	6	2	1	1	2
- Educational	20	5	5	8	2
- Governmental	8	4	0	4	0
- Business	11	0	9	2	0
- Miscellaneous	9	2	3	2	2
Student studies:	24	9	1	10	4
- simulation studies	18	7	0	7	4
- other	6	2	1	3	0
Identity of raters:					
- subordinates	24	2	13	8	1
- supervisors	3	1	1	1	0
- self-rating	35	13	4	13	5
- behavioral	8	3	0	4	1
- peer	2	1	0	0	1
Sex-composition[4]					
- subordinates (% **%**)	39.0 (24)	44.4 (1)	32.9 (15)	50.5 (7)	44.4 (1)
- leaders (% **%**)	58.9 (47)	59.3 (10)	61.0 (17)	57.6 (17)	53.4 (3)

[1] The 'proportion stereotypic' represents the number of comparisons that were *significant* in the stereotypic direction divided by the total amount of comparisons.

[2] The 'absolute difference' represents the proportion of comparisons that were in the stereotypic direction - not necessarily significant.

[3] In parenthesis is the number of comparisons on which the mean effect size could be calculated.

[4] The sex-composition is calculated over the studies that provided data on sex ratios and did not manipulate or match sex ratios. Between parenthesis is the number of comparisons on which the sex-composition is calculated.

Table 3. *Proportion stereotypic for different study types and measurement instruments.*

variable and class	all comparisons (n = 72)	interpersonal style comparisons (n = 20)	transformational style comparisons (n =18)	task and transactional style comparisons (n =26)	democratic versus autocratic comparisons (n = 8)
Organizational studies	.324 (48)	.265 (11)	.416 (17)	.249 (16)	.213 (4)
Student studies	.198 (24)	.306 (9)	0 (1)	.10 (10)	.25 (4)
Assessment studies	.167 (24)	.10 (9)	.25 (1)	.125 (8)	.37 (5)
Organizational setting:					
Educational	.255 (20)	.433 (5)	.32 (5)	.166 (8)	0 (2)
Governmental	.20 (8)	.15 (4)		.25 (4)	
Business	.445 (11)		.47 (9)	.33 (2)	
Miscellaneous	.361 (9)	.075 (2)	.417 (3)	.5 (2)	.425 (2)
Identity of raters:					
subordinates	.264(24)	0 (2)	.335 (13)	.25 (8)	0 (1)
supervisors	.333 (3)	0 (1)	1 (1)	0 (1)	
self-rating	.317 (35)	.424 (13)	.433 (4)	.154 (13)	.37 (5)
behavioral	.125 (8)	0 (3)		.25 (4)	0 (1)
peer	.075 (2)	.15 (1)			0 (1)

Appendix

Author/study	setting	Style[1]	rater type	Effect size[2]/ significance	sex-composition subordinates	sex-composition management	remarks
Bass, Avolio & Atwater, 1996: study 1	(USA) -Fortune 50 firm managers, **&**: 68 % high, 32% lower **%**: 72% high, 27% lower	TRF-1 TA-1	subordinates subordinates	+.21, *sign* -.12, $^{2}/_{3}$ *sign*	219**&**/658**%**	79 **&**/150**%**	managers selected subordinates and received feedback confounding with organizational factors very likely
study 2	-Small to mid-size organizations divers lower level managers	TRF-1 TA-1	subordinates subordinates	+.19, ½ *sign* -.05, $^{1}/_{3}$ + *sign*, $^{1}/_{3}$ - *sign*, $^{1}/_{3}$ *ns*	124**&**/147**%**	38**&**/58**%**	confounding with organizational factors very likely
study 3	-workshop participants of diverse organizations	TRF-1 TA-1	subordinates subordinates	+.07, ¼ *sign* -.08, ½ *sign*	532**&**/381**%**	154**&**/131**%**	managers selected subordinates and received feedback confounding with organizational factors very likely
Carless, 1998	level 1-4 branch managers international bank (Australia)	TRF-1 TRF-1 TRF-2 TRF-2 TRF-3 TRF-3 TRF-3	self subordinates self subordinates self subordinates supervisor	+.23, 1/3 *sign* +.01, *ns* +.26, 2/5 *sign* +.05, *ns* +.33, *sign* +.03, *ns* +.31, *sign*	477**&**/81**%**	120**&**/184**%**	
Denmark, 1993	diverse (USA)	TRF-4	subordinates	*Ns*	25**&** /15 **%@**	28**&**/64**%**	higher level leaders more empowering, male sub. rate female leaders higher ability
Dhillon & Nagrath, 1988	university students (India)	TA-5 INT-5	self self	-.23 *ns* +1.00, *sign*	not applicable	not applicable	most variance explained by smoking or not-smoking
Dhillon, 1989	high school students (India)	TA-5 INT-5	self self	+.03, *ns* +.22, *sign*	not applicable	not applicable	birth order explained most variance
Doherty, 1997	inter university administrators (Canada)	TRF-1 TA-1	subordinates subordinates	+.41, 3/5 *sign* -.31, 1/3 *sign*	unknown	37**&**/77**%**	sex of leader confounded with age and possession of graduate degree
Druskat, 1994	members of religious orders (USA)	TRF-1 TA-1	subordinates subordinates	+.30, *sign* - 29, *sign*	all male/female	all male/female	confounding with sex of raters

Gardiner & Tiggeman, 1999	male-and female-dominated industries (Australia)	TA-6 INT-6	self self	+ .47, *sign* +.50, *sign*	<15%**&**/ <15%**%**	<15%**&**/ <15%**%**	confounding organizational facors and gender-typing
Gibson, 1995	diverse managers (Norway, Sweden, Australia, USA)	AD-7 TA-7 INT-7	self self self	*Ns* *Direction and significance differs per country*	unknown	45%**&**/55%**%**	confounding with organizational factors very likely
Hare, Koenigs & Hare, 1997	management training participants (USA)	INT-8 AD-8 INT-8 AD-8	self self peer peer	+.09 , *ns* +.33 N(110)*sign*, N(20)*ns* +.24 N(110)*ns*, N(20)*sign* +.15 *ns*	unknown	unknown	110 of 130 pairs of managers matched on coworker perception of three value dimensions. Remaining 20 more stereotypical.
Jantzi & Leithwood, 1996	elementary and secondary school principals (Canada)	TRF-1	subordinates	+.28, *ns*	72%**&**/28%**%**	32 %**&**/68%**%**	Confounding of leader sex with schooltype and sex of raters
Jensen, White & Singh,1990	managers health care organization (USA)	INT-9 TA-9	subordinates subordinates	*Ns* ***+ sign***	unknown	unknown	
Johnson, 1993 manager percentage of behavior in interaction self and subordinate perceptions	students acting as manager(1)/subordinates(2) in organizational simulation (USA)	AD-10 INT-10 TA-10 TA-10 INT-10 INT-10 AD-10 AD-10	behavioral observations behavioral observations self subordinates self subordinates	-.22, *ns* -.13, *ns* -.55, *sign* +.42, *ns* +.42, *ns* +.52, *ns* -.03, *ns* +.55, *ns*	FF/MM/FM	not applicable	predictions for expectation states, socialization and structure theories; sex-composition manipulated. most support for both structural theories
Komives, 1991a	hall directors (USA)	TRF-1 TA-1 AD-11 TA-11 INT-11	self	-.40, ¼ + *sign*, ¾ -, *ns* -.27, *ns* -.55, *ns* -.66, *ns* +.09, *ns*	338**&**/270**%**	43**&**/31**%**	possible confounding of sex-composition of subordinates and sex of manager
Komives, 1991b	hall directors (USA)	TRF-1 TA-1	subordinates	-.09, *ns* -.13 *ns*	338**&**/270**%**	43**&**/31**%**	Interaction manager sex and subordinate sex not significant.
Korabik, Baril, Galen & Watson, 1993	MBA students with/without management experience in simulation	INT-12 INT-12 TA-12	self exper. self without self exper.	*Ns* ¾ +, ¼ *ns* *ns*	unknown	16**&**/27**%**	evaluation by subordinates showed gender congruency effects

	(USA)	TA-12 TA-13 INT-13	self without observations observations	*ns* *ns* *ns*			
Lee, Smith & Cioci (1993)	high-school principals (USA)	TRF-14	subordinates	.02 *ns*	3910**&**/4847**%**	37**&**/338**%**	confounding of teacher and principal sex
Lewis & Fagenson Eland, 1998	leaders of federal government agency (USA)	TA-6 TA-6 INT-6 INT-6	self supervisor self supervisor	-.63, *sign* -.22, *ns* .04, *ns* .02, *ns*	unknown	leaders 97**&**/149**%** supervisors 22%**&**/88%**%**	125 leader/supervisor pairs, mixed support for structural factors and gender, no support for interaction gender and structure
Maher, 1997	evening students (USA)	TRF-1 TA-1	subordinates	*Ns* *Ns*	133**&**/129**%**	99**&**/163**%**	correlation between actual and stereotypical perceptions for male subordinates
Pratz & Jacobowitz, 1996	student faciliatators of MBA (USA)	TA-15 INT-15 INT-16 TA-16	self self self self	-1.08, *sign* + .87, *sign* + .03, *ns* - .17, *ns*	unknown	17**&**/31**%**	
Rinfret & Lortie-Lussier, 1997	public service managers (Canada)	INT-17 TA-17	self self	+.17 3/5 *sign* +.21 2/3 *sign*	unknown	168**&**/230**%**	confounding sex with tenure, age, position, non-work situation, educational level and organizational level
Sakata & Kurokowa, 1992	students acting as leader, co-leader and subordinate (Japan)	TA-18 TA-18 INT-18 TA-18	observation observation observation self	- *sign* + *sign* - *sign* + *sign*	1**&** / 1 **%** 1**%**	1**&** / 1**%** 1**&** / 1**%**	leadership style influenced by masculinity/femininity of task and interaction with sex.
Wheatley, Amin, & Maddox, 1991	MBA-experienced students (USA)	AD-19	self	+.15 *sign*	not relevant	41**&** / 71**%**	

[1] TRF = Transformational leadership; TA = Task- and transactional leadership; INT = Interpersonal leadership styles; AD = Autocratic versus democratic styles, 1 = Multifactor Leadership Questionnaire (MLQ , Bass & Avolio, 1989); 2 = Leadership Practices Inventory (LPI, Kouzes & Posner, 1990); 3 = Global Transformational Scale (GTS, Carless, Wearing & Mann, 2000); 4 = instrument by Denmark (1993), 5 = Bass Orientation Inventory, (Bass, 1962); 6 = Leadership Behavior Description Questionnaire (LBDQ, Stogdill, 1963); 7 = Leadership Effectiveness Questionnaire (LEQ, Flamholtz, 1986); 8 = Instrument based on Bales (1950) 9 = Value Survey Module (VSM, Hofstede, 1982); 10 = Observation Instrument by Johnson (1993) ; 11 = Achieving Styles Inventory (ASI, Lipman-Blumen & Leavitt, 1979); 12 = Rahim's Organizational Conflict Inventory (ROCI, Rahim, 1983); 13 = Transcripts of Behavior, Korabik et. al. (1993); 14 = Administrator and Teacher Survey, (ATS, Moles, 1988); 15 = Personality Research Form-E (PRF, Jackson, 1989); 16 = Shanan Sentence Completion Technique (SSCT, Shanan, 1965); 17 = instrument by Rinfret and Lortie Lussier, (1997); 18 = instrument by Sakata and Kurokowa, (1992); 19 = Management Practices Questionnaire (Haire, Ghisselli & Porter, 1966).

[2] Positive effect sizes indicate that female managers use style more, negative effect sizes indicate that male managers use style more.